

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A computerized method for managing returnable containers in a manufacturer's supply chain to facilitate allocation of containers to a plurality of suppliers in ~~number adequate to meet~~in response to a manufacturer's demand for parts from suppliers according to said manufacturer's production schedule comprising:

creating at least one container inventory holding area in said manufacturer's supply chain;

storing at said container inventory holding area a plurality of containers for use by a plurality of suppliers in said manufacturer's supply chain;

calculating a supplier on-hand container inventory quantity for each of said plurality of suppliers;

calculating a container allocated days number for each of said plurality of suppliers, said container allocated days number for each supplier comprising a number of days a container remains in said supplier's on-hand container inventory ~~in response to meet~~ said manufacturer's demand for parts over a specified period of time, said container allocated days number calculated by said manufacturer;

calculating a parts demand value for each of said plurality of suppliers, said parts demand value for each supplier calculated according to said manufacturer's actual requirement for parts from said supplier according to said manufacturer's

production schedule, said parts demand value calculated by said manufacturer;
entering in a database at a computer said:

- (a) supplier on-hand container inventory quantity for each of said plurality of suppliers;
- (b) a container allocated days number for each of said plurality of suppliers; and
- (c) a parts demand value for each of said plurality of suppliers;

calculating at said computer by said manufacturer a container allocation quantity for each of said plurality of suppliers, wherein said container allocation quantity for each supplier varies for each supplier according to:

- (1) said supplier's parts demand value as determined by said manufacturer's production schedule; and
- (2) said supplier's container allocated days number;

calculating at said computer by said manufacturer for each of said plurality of suppliers an actual container quantity according to said container allocation quantity and said supplier on-hand container inventory quantity for each of said suppliers; and

releasing from said container inventory holding area to each of said plurality of suppliers a number of containers equal to said actual container quantity wherein said containers are released by said manufacturer according to said actual container quantity calculated by said manufacturer.

- 2. (Canceled)
- 3. (Previously Presently) The method of claim 2 wherein calculating for each of said

plurality of suppliers a container allocated days number comprises determining a process flow of containers for each of said plurality of suppliers.

4. (Original) The method of claim 1 further comprising adjusting said actual container quantity for one of said plurality of suppliers based on a request from said supplier.
5. (Original) The method of claim 1 wherein said supplier on-hand container inventory quantity comprises empty containers at said supplier's facility and full containers waiting to ship.
6. (Original) The method of claim 5 wherein said supplier on-hand inventory container quantity further comprises empty containers in-transit to said supplier's facility and full containers in-transit to said manufacturer's facility.
7. (Original) The method of claim 1 wherein said inventory holding area is of the type returnable container center.
8. (Currently Amended) A computerized returnable container management system to facilitate allocation of containers to a plurality of suppliers in ~~a number adequate to meet response to~~ a manufacturer's demand for parts from suppliers according to said manufacturer's production schedule comprising:
 - a container inventory holding area;
 - a plurality of containers at said container inventory area, said containers for use by a plurality of suppliers in said manufacturer's supply chain;
 - a supplier on-hand container inventory quantity calculated by said manufacturer for each of said plurality of suppliers;
 - a container allocated days number calculated by said manufacturer for

each of said plurality of suppliers wherein said number for each supplier comprises a number of days a container remains in said supplier's on-hand container inventory;

a parts demand value for each of said plurality of suppliers wherein said value for each supplier is calculated according to said manufacturer's actual requirement for parts from said supplier according to said manufacturer's production schedule;

a container allocation quantity calculated by said manufacturer for each of said plurality of suppliers wherein said quantity for each supplier varies according to said supplier's parts demand value and said supplier's container allocated days number;

an actual container quantity calculated by said manufacturer for each of said plurality of suppliers based on said supplier's container allocation quantity and said supplier's on-hand container inventory quantity;

a database at a computer for storing said supplier on-hand container inventory quantity, said container allocated days number, said parts demand value, said container allocation quantity, and said actual container quantity for each of said plurality of suppliers; and

a software application at said computer for determining when to release from said container inventory holding area to each of said plurality of suppliers a number of containers equal to said actual container quantity wherein said manufacturer releases said containers.

9. (Canceled)

10. (Previously Presently) The system of claim 9 wherein calculating for each of said plurality of suppliers a container allocated days number comprises determining a process flow of containers for each of said plurality of suppliers.
11. (Original) The system of claim 8 further comprising adjusting said actual container quantity for one of said plurality of suppliers based on a request from said supplier.
12. (Original) The system of claim 8 wherein said supplier on-hand container inventory quantity comprises empty containers at said supplier's facility and full containers waiting to ship.
13. (Original) The system of claim 12 wherein said supplier on-hand inventory container quantity further comprises empty containers in-transit to said supplier's facility and full containers in-transit to said manufacturer's facility.
14. (Original) The system of claim 8 wherein said inventory holding area is of the type returnable container center.
15. (Withdrawn) A method for managing returnable containers in a manufacturer's supply chain comprising:
 - identifying a plurality of inventory holding areas;
 - determining a plurality of container process flows wherein each container process flow represents a transfer of containers from a first one of said plurality of inventory holding areas to a second one of said plurality of inventory holding areas;
 - assigning at least one container type to each of said plurality of container process flows;
 - determining an allocation quantity of containers for each supplier in said

manufacturer's supply chain, said allocation quantity determined according to said process flows;

determining a container inventory at each of said inventory holding areas;

and

transferring said container inventory at each of said inventory holding areas according to said container process flows to provide to each of said suppliers a quantity of containers equal to said allocation quantity for said container type assigned to said container process flow.

16. (Withdrawn) The method of claim 15 wherein determining said allocation quantity of containers comprises:

determining for each of said plurality of suppliers a standard allocated days value;

determining for each of said plurality of suppliers a parts demand value;

and

multiplying said standard allocated days value by said parts demand value for each of said plurality of suppliers.

17. (Withdrawn) The method of claim 15 wherein said plurality of inventory holding areas is selected from the group of inventory holding area types consisting of supplier on-hand, supplier in-transit full, supplier in-transit empty, consolidation center, manufacturer's facility, and returnable container center.
18. (Withdrawn) The method of claim 17 wherein transferring said container inventory at each of said inventory holding areas comprises shipping said container inventory from a returnable container center inventory holding area to a supplier

in-transit empty inventory holding area.

19. (Withdrawn) The method of claim 15 further comprising allocating a safety stock quantity of containers to each supplier.
20. (Withdrawn) The method of claim 15 further comprising modifying said allocation quantity of containers for each of said suppliers according to changes in said manufacturer's production schedule.